

Amercoat 741

Inorganic Silicate Topcoat

Product Data/ Application Instructions

- Excellent solvent, temperature resistance
- Resists up to 5.0×10^9 Rad radiation
- Not combustible after application and curing
- One component self curing solvent based topcoat

Typical Uses

Amercoat 741 can be used as a topcoat on Dimetcote zinc silicate primers in the chemical and petrochemical, marine, offshore, conventional and nuclear industry. It can be used as a high temperature resistant topcoat, with excellent mechanical properties over zinc silicate primers, like exterior surfaces of stacks and (insulated) piping up to 400°C. Due to its inertness and inorganic nature, Amercoat 741 has excellent resistance to radiation and is recommended as a white topcoat over Dimetcote zinc silicate primers on steel structures exposed to high levels of cumulative nuclear radiation.

Outstanding Characteristics

Amercoat 741 is a single component inert inorganic topcoat of 125 µm dry film thickness with excellent resistance to a large variety of solvents. Amercoat 741 is after application and curing a non-combustible coating.

Systems using Amercoat 741

Amercoat 741 is normally recommended as a single topcoat of 125 µm dry film thickness over Dimetcote 6 or Dimetcote 9 series. In case Dimetcote 9 Series is being used the substrate shall be fresh water washed and dried prior to the application of Amercoat 741. When other zinc silicate primers are concerned, ask your PPG representative for a suitable recommendation.

Physical Data

Finish	flat
Colour	white, pearl grey (SC 708)*
Components	1
Curing mechanism	solvent release and reaction with atmospheric moisture
Volume solids	62% (ISO 3233)**
VOC**	
EC SED 1999/13/EC ..	276 g/kg (480 g/l)
UK PG6/23(92) Appendix 3	475 g/l
Dry film thickness	125 µm per coat
Number of coats	1
Calculated coverage	5.0 m ² /l at 125 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.73 kg/l
Temperature resistance	400°C dry heat
Flash points	
(Closed Cup).....	°C °F
Amercoat 741	12 54
Amercoat 65	24 75

* Due to nature of the product, whitening of the surface will occur on exposure. This will not be detrimental to the product performance.

** Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

*** VOC figures are quoted according to both the EC directive 1999/13/EC which are theoretically calculated figures and the UK PG6/23(92) Appendix 3 which are practically determined figures.

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Surface Preparation

NEW SURFACES - Prepare surface in accordance with the Dimetcote primer to be used. Once primed, surface should be free from any foreign matter (like dust and moisture) before applying Amercoat 741.
OLD OR DAMAGED ZINC SILICATES - Remove dust, contaminants and zinc salts. Bare substrates should be primed with suitable zinc silicate primer.

Application Equipment

AIRLESS SPRAY - Standard airless equipment can **not** be used! *Binks Alpha* airless is the only acceptable airless pump having a 60:1 pump ratio and a 0.030" tip or higher. Use the lowest possible spraying pressure; hose length should not exceed 12 meters.

CONVENTIONAL SPRAY - Industrial equipment having separate air and fluid pressure regulators and a mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential. Material hose: internal diameter 0.5 inch. Maximum length of material hose is 6 meter.

MIXER - Use power mixer powered by an air motor or an explosion proof electric motor.

Application Data Summary

Like all high-performance coatings, Amercoat 741 must be applied as recommended to obtain the maximum protection for which this coating is formulated. To obtain the maximum performance for which Amercoat 741 is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your PPG representative.

Application Data

Substrate Dimetcote primed steel
Application methods conventional spray, *Binks Alpha* airless spray

Potlife (at 20°C/68°F) not applicable

Environmental Conditions

(during application and drying)

Air temperature: -18 to 50°C 0 to 122°F

Surface temperature: -18 to 70°C 0 to 158°F

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

Drying Times

(at 50-90% RH)	°C/°F	10/50	20/68	35/95
insoluble to water (in minutes)		60	30	15
dry to handle (in hours) ...		6	4	2

NOTE: Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperatures and longer at lower temperatures. Prior to recoating ensure the surface is clean. Maximum recoating time depends on coating system to be used. Amercoat 741 may be accelerated by wetting the surface with fresh water. Consult your PPG representative for specific recommendations.

Thinner/cleaner Amercoat 65

Amercoat 741

Application Procedure

Amercoat 741 is a one component product and packaged in a 10 l can.

1. Flush equipment with recommended cleaner before use.
2. Mix all material thoroughly, using recommended power mixer before applying. If thinning is necessary for workability, thin with no more than 10% of recommended thinner. Continue mixing during application.
3. Spray on heavy, wet coat by even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. Follow with a "cross spray" pass at right angles to first pass.
4. Give special attention to angles, corners rough spots, edges, etc. to avoid pinholes, bare areas and holidays.
5. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than 125 µm for a single coat application, apply additional material as needed.
6. To repair or touch up bare areas, simply apply additional material; smaller areas may be brushed. Allow 30 minutes at 20°C/68°F between full coats.
7. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.
8. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift.

NOTE: Avoid moisture contact in open cans. Keep containers closed to prevent moisture access.

Amercoat 741 is moisture reactive.

Shipping Data

Packaging	10 l in a 10 l drum
Shipping weight	approx. 18.6 kg
Shelf life	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F)

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Caution

This product is combustible. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to health:

1. circulate adequate fresh air continuously during application and drying;
2. use fresh air masks and explosion proof equipment;
3. prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact, exposure and safety measures see Safety Data Sheet.

Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

Warranty

PPG warrants its products to be free from defects in material and workmanship. PPG's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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